

ABSTRACT

A laboratory device design particularly for a multiplate format that includes a manifold wherein the position of the plate is not a function of gasket compression or vacuum rate applied. In one embodiment, the device has a modular design, wherein one or more removable inserts, preferably with different functionalities can be positioned between a base component and a collar component. The particular insert(s) chosen depend on the desired sample preparation or assay to be carried out. The insert(s) are stacked and are positioned between the base and collar as a unit, so that the stack within the manifold does not move during evacuation of the vacuum chamber. The consistent position of the insert(s) facilitates using vacuum sample processing with automated liquid handlers.